Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of Amendment of Part 22 of the Commission's Rules to Benefit the Consumers of Air-Ground Telecommunications Services Biennial Regulatory Review – Amendment of Parts 1, 22, and 90 of the Commission's Rules	WT Docket No. 03-103

COMMENTS OF MOTOROLA, INC.

Motorola, Inc. ("Motorola") hereby submits these comments in response to the *Notice of Proposed Rule Making* in the above-captioned proceeding, initiated in part to enhance the options available to the public in the provision of air-ground telecommunications services on commercial airplanes.[1]

According to the *NPRM*, the FCC believes that its current rules concerning the use of commercial air-ground spectrum may be "impeding the efficient, competitive provision of services to the public."[2] Thus, the Commission has invited public comment on several related issues including whether consumer choice would be enhanced by granting flexibility to use air-ground spectrum to provide both air-ground and terrestrial wireless services and, also, whether

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1 Amendment of Part 22 of the Commission's Rules to Benefit the Consumers of Air-Ground Telecommunications Services, Biennial Regulatory Review – Amendment of Parts 1, 22, and 90 of the Commission's Rules, WT Docket No. 03-103, *Notice of Proposed Rule Making*, FCC 03-95, 18 FCC Rcd 8380 (rel. Apr. 28, 2003) ("*NPRM*").

2 *NPRM* at ¶ 3.

the rules for cellular spectrum, or any other CMRS spectrum, should be changed to allow greater freedom to provide air-ground service.[3] The Commission also seeks comment on whether it should modify or repeal the prohibition against the use of cellular equipment on aircraft, noting that such a change would require FAA action as well.[4]

In general, Motorola would agree that the operational rules for air-ground service need updating, particularly as the current Part 22 rules appear unnecessarily biased toward the provision of analog service. Allowing licensees to avail themselves to more state-of-the art technologies, for example, will result in greater spectrum efficiency and provide customers with a quality of service more commensurate with terrestrial wireless service. Motorola supports efforts such as these to enhance the commercial viability and utility of the air-ground allocation.

However, in providing licensees with greater operational and technical flexibility, the Commission must ensure that licensees in nearby allocations continue to be protected from interference. In comments submitted earlier this year in response to the report issued by the FCC's Spectrum Policy Task Force, Motorola stated that "[w]hile greater flexibility in spectrum use is a laudable objective, the Commission must not allow users total flexibility to provide any service, under any technical parameters."[5] Motorola further stated "[u]nlimited flexibility would allow extreme variations in technical parameters and could result in systems with radically different power and operating characteristics operating in the same or adjacent channels."[6]

In this particular situation, the FCC must move especially cautiously considering that the adjacent allocations to the air-ground service are used by public safety agencies, other private

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3 *Id.* at ¶¶ 20-22.

4 *Id.* at ¶ 22.

5 *See* Comments of Motorola, Inc., ET Docket No. 02-135, (January 27, 2003) at 4.

6 *Id.*

wireless services including the critical infrastructure industries, andcommercial carriers.[7] In many ways, the 800 MHz air-ground allocation serves as a guard band between commercial cellular networks and public safety and other private wireless operations, particularly with the strict technical rules that apply and limited current use. While increased use of the band does not necessarily mean that a greater potential for interference exists, before adopting any changes in the air-ground rules that greatly affect the density of use as well as the types of applications provided in the air-ground spectrum, the FCC must fully consider the potential impact to adjacent allocations and avoid creating any new interference scenarios similar to those being experienced in the 806-824/851-869 MHz band.[8]

Similarly, before the Commission eliminates the prohibition on airborne use of cellular handsets, it should be certain that such operation would not interfere with terrestrial cellular operations. Proponents of airborne cellular must provide clear and detailed technical analysis demonstrating a lack of interference – or the capabilities of appropriate interference mitigation

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[7] The 800 MHz air-ground service is allocated the 849-851/894-896 MHz bands. *See* 47 C.F.R. § 22.857. The cellular radio service is allocated the 824-849/869-894 MHz band. *See* 47 C.F.R. § 22.905. Public safety, other private wireless and commercial SMR services are allocated the 851-869 MHz band (paired with 806-824 MHz). Private wireless and commercial SMR services operate in the 896-901 MHz band (paired with 935-940 MHz). *See* 47 C.F.R. § 90.613.

[8] *See, e.g.*, Improving Public Safety Communications in the 800 MHz Band, Consolidating the 900 MHz Industrial/Land Transportation and Business Pool Channels, WT Docket No. 02-55, *Notice of Proposed Rule Making*, FCC 02-81 (rel. Mar. 15, 2002).

techniques – before such use is permitted. As implied by the *NPRM*, such studies must also consider the effects to aircraft operations and well as terrestrial wireless systems.

Respectfully submitted,

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